

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	23	(US-20050056346-\$ or US-20050190509-\$ or US-20050262922-\$ or US-20060066299-\$ or US-20060022668-\$ or US-20020063984-\$ or US-20030210488-\$ or US-20020030937-\$).did. or (US-6275028-\$ or US-6797130-\$ or US-5696445-\$ or US-5945197-\$ or US-6400519-\$ or US-6295175-\$ or US-6373647-\$ or US-6965229-\$ or US-5952563-\$ or US-6128160-\$ or US-5998993-\$ or US-6140814-\$).did. or (JP-2001006133-\$ or JP-2006040504-\$).did. or (US-6314814-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/09/20 09:36
L2	1010	"L23" AND (fixed pinned)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/09/20 09:37
L3	12	L1 AND (fixed pinned)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/09/20 09:37
L4	13	("20020063984"   "20020113587"   "20030030934"   "20030038626"   "5640089"   "5998993"   "6081114"   "6249392"   "6295175"   "6373647"   "6400519"   "6489762"   "6519108").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:42
L5	9811	360/25,31,75.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 12:37
L6	65	360/25,31,75.ccls. AND ((pinned fixed) WITH layer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 12:37
S1	13	"711782"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 09:58

## EAST Search History

S2	1	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (fixed ADJ2 layer) AND (bumps WITH (disc disk)) AND magnet	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 12:53
S3	1	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (fixed ADJ2 layer) AND (bumps WITH (disc disk))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:09
S4	45	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (bumps WITH (disc disk))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 10:16
S5	2149	(bumps WITH (disc disk))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:09
S6	14	(bumps WITH (disc disk)) AND 324/210-212.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 10:17
S8	17	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND ((fixed ADJ2 layer) WITH (inversion invers\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 12:38

## EAST Search History

S9	97	("5455727" "5384677" "5877919" "4422115" "4605977" "5988512" "6039260" "4376960" "4795981" "5382887" "5488521" "6225799" "6225799" "6249824" "4314295" "4318145" "4331990" "4482929" "5202863" "5229901" "5517472" "5574234" "5592349" "5737229" "5768054" "5811700" "6007896" "6166888" "6221442" "6221442" "4330804" "4339777" "4396965" "4419700" "4628384" "4802042" "4964242" "5289327" "5305165" "5379171" "5383078" "5399407" "5418667" "5430661" "5499149" "5504638" "5526204" "5535073" "5542281" "5579189" "5606476" "5663854" "5678086" "5694267" "5704715" "5757492" "5783797" "5835303" "5844675" "5867340" "5880587" "5929987" "5945197" "5963397" "5968608" "5973884" "6032352" "6049443" "6078465" "6128160" "6151917" "6160685" "6215609" "6215609" "4244788" "4417289" "4456938" "4458274" "4458398" "4491884" "4502082" "4531169" "4556924" "4577307" "4578727" "4578726" "4600955" "4620250" "4779156" "4786991" "4791500" "4796121" "4818907" "4858050" "4896237" "4910615" "4935830" "4941293" "4943875" "4949194" ).pn.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 12:38
S10	1	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND ((pinned fixed) ADJ2 layer) AND (bumps WITH (disc disk)) AND magnet	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 12:53
S11	194	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (((pinned fixed) ADJ2 layer) SAME (inversion invers\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 12:57
S12	315	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (((pinned fixed) ADJ2 layer) SAME (inversion invers\$3 invert\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 12:59
S13	4	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (((pinned fixed) ADJ2 layer) SAME (inversion invers\$3 invert\$3)) AND ((disc disk) WITH (defect bump))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 12:58

## EAST Search History

S14	72	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (((pinned fixed) ADJ2 layer) SAME (inversion invers\$3 invert\$3)) AND test\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 13:09
S15	1	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND (((pinned fixed) ADJ2 layer) SAME (inversion invers\$3 invert\$3)) AND 324/210-212.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 13:10
S16	22	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND ((pinned fixed) ADJ2 layer) AND 324/210-212.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:07
S17	13	("20020063984"   "20020113587"   "20030030934"   "20030038626"   "5640089"   "5998993"   "6081114"   "6249392"   "6295175"   "6373647"   "6400519"   "6489762"   "6519108").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 13:22
S18	4	("5650887" "6295175" "6507447" "6646822").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 13:22
S19	19	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND magnet AND 324/210-212.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 13:58
S20	404	324/210.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 13:58
S21	72	(GMR (giant ADJ2 (magnetoresistive "magneto-resistive"))) AND 324/210-212.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 13:58
S22	8	((pinned fixed) ADJ2 layer) AND 324/210-212.ccls. NOT S21	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:52

## EAST Search History

S23	49	((GMR (giant ADJ2 (magnetoresistive "magneto-resistive")) (fixed ADJ2 layer)) AND (bumps WITH (disc disk)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:09
S24	82	((GMR (giant ADJ2 (magnetoresistive "magneto-resistive")) (pinned fixed ADJ2 layer)) AND (bumps WITH (disc disk)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 15:00
S25	4	((pinned fixed) ADJ2 layer) AND 324/260-262.ccls. NOT S21	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:52
S26	51	((GMR (giant ADJ2 (magnetoresistive "magneto-resistive")) ((pinned fixed) ADJ2 layer)) AND (bumps WITH (disc disk)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:54
S27	0	S26 NOT S24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:56
S28	536	360/324.11.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 12:36
S29	6	360/324.11.ccls. AND (bump WITH (disk disc))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 14:57
S30	1	((((GMR (giant ADJ2 (magnetoresistive "magneto-resistive")) (pinned fixed ADJ2 layer)) AND (bumps WITH (disc disk))))).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 15:00
S31	205	"bump disk"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 15:57

## EAST Search History

S32	11	(yamamoto NEAR2 kenrou).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 16:11
S33	2	("6275028").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 16:13
S34	56	(otsu NEAR2 takayoshi).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/19 16:13